

EXPRESS MAIL CERTIFICATE

Date 1/10/02 Label No. 2767721587US

I hereby certify that, on the date indicated above, this paper or fee was deposited with the U.S. Postal Service & that it was addressed for delivery to the U.S. Patent and Trademark Office, Washington, D.C. 20231 by "Express Mail Post Office to Addressee" service.

  
Name (Print)

Signature

PLEASE CHARGE ANY DEFICIENCY OR CREDIT ANY EXCESS IN THE FEES DUE WITH THIS DOCUMENT TO OUR DEPOSIT ACCOUNT NO. 04-0100

Customer No.:



07278

PATENT TRADEMARK OFFICE

Docket No: 5408/0A237-US2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Philip G. Sweeny

Serial No.: Not Yet Assigned

Art Unit: Not Yet Assigned

Filed: Herewith

Examiner: Not Yet Assigned

For: HYDANTOIN-ENHANCED HALOGEN EFFICACY IN PULP AND PAPER APPLICATIONS

Reissue of: U.S. Patent No. 5,565,109

Issued: October 15, 1996

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents  
Box Reissue  
U.S. Patent and Trademark Office  
Washington, D.C. 20231

January 10, 2002

Sir:

Before examination, please amend the above-identified application as follows:

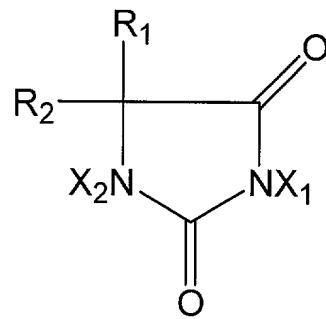
**IN THE CLAIMS:**

Please amend claims 14 and 16 pursuant to 37 C.F.R. §1.173 as follows:

14. (Amended) In a process for making paper from pulp fiber wherein from 0.2 to 3 weight percent of organic matter comprising 95 to 99 weight percent pulp fiber is maintained in a circulating water slurry in the presence of sizing, the improvement of performing said process in the presence of a slimicidally effective amount of an N-hydrogen compound and a slimicide in a molar ratio of from 0.1:1 to 10:1 in said circulating water slurry; wherein said N-hydrogen compound is p-toluenesulfonamide, dimethylhydantoin, methylethylhydantoin, cyanuric acid, succinimide, urea, 4,4-dimethyl-2-oxazolidinone, or glycouril and said slimicide is chlorine gas, bromine, bromine chloride, an alkali metal or alkaline earth metal hypohalite, a halogenated hydantoin, a halogenated cyanurate, or halogenated cyanuric acid and the amount of the N-hydrogen compound present in said circulating water slurry is sufficient to enhance the biocidal efficacy of the slimicide and reduce absorbable organic halogen (AOX) by-product formation, wherein the N-hydrogen compound is directly added to the slurry before or after the addition of the slimicide or with the slimicide in a mixture consisting essentially of the slimicide and the N-hydrogen compound.

16. (Amended) In a process for making paper from pulp fiber wherein from 0.2 to 3 weight percent of organic matter comprising 95 to 99 weight percent

pulp fiber is maintained in a circulating water slurry in the presence of sizing, the improvement of performing said process in the presence of a slimicidally effective amount of an N-hydrogen compound and a slimicide in a molar ratio of from 0.1:1 to 10:1 in said circulating water slurry; wherein said N-hydrogen compound is p-toluenesulfonamide, dimethylhydantoin, methylethylhydantoin, cyanuric acid, succinimide, urea, 4,4-dimethyl-2-oxazolidinone, or glycouril and said slimicide is a halogenated hydantoin of the formula



wherein R<sub>1</sub> and R<sub>2</sub> are independently selected from the group consisting of lower alkyl having 1 to 12 carbon atoms, wherein X<sub>1</sub> and X<sub>2</sub> are independently selected from the group consisting of bromine and chlorine, and the amount of the N-hydrogen compound present in said circulating water slurry is sufficient to enhance the biocidal efficacy of the slimicide and reduce absorbable organic halogen (AOX) by-product formation, wherein the N-hydrogen compound is directly added to the slurry before or after the addition of the slimicide or with the slimicide in a mixture consisting essentially of the slimicide and the N-hydrogen compound.

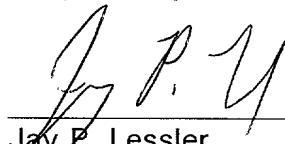
## REMARKS

Reconsideration and re-issuance of U.S. Patent No. 5,565,109 ("the '109 Patent"), in view of the above amendments and the following remarks, is respectfully requested.

As discussed in paragraphs 6 and 7 of the accompanying Reissue Application Declaration and Power of Attorney, the claims of the '109 Patent as modified by the Reexamination Certificate (3940th) are broader than the original claims of the '109 Patent. Claims 14 and 16, the only independent claims now in the '109 Patent, have been amended to have the same or narrower scope than the original claims of the '109 Patent. More specifically, claims 14 and 16 have been amended to require that the N-hydrogen compound is directly added to the circulating water slurry before or after the addition of the slimicide or with the slimicide in a mixture consisting essentially of the slimicide and the N-hydrogen compound. This limitation is found in original claims 1 and 13 of the '109 Patent. Claims 2-4, 8, 11, 12, and 14-16 are pending.

In view of the above amendments and remarks, it is respectfully requested that the application be reconsidered and that all pending claims be allowed and the case passed to issue.

Respectfully submitted,

  
\_\_\_\_\_  
Jay P. Lesser  
Reg. No. 41,151  
Attorney for Applicant

DARBY & DARBY, P.C.  
805 Third Avenue  
New York, N.Y. 10022  
Phone (212) 527-7700